

**Claims**

What is claimed is:

1. A Method for persistently self-replicating multiple ranges of cells through a copy and paste operation, in a multi dimensional spreadsheet comprising a plurality of cells identified by a cell address along each dimension, a range of cells comprising one or a plurality of cells, the method comprising the steps of:

- defining a set of ranges of cells, each range of cells having the same size;
- each time the content of a range of cells belonging to said set is changed, automatically performing a self-replication operation, said self-replication operation comprising the steps of:
  - copying the changed range of cells onto a buffer;
  - determining the set of ranges of cells to which the changed range of cells belongs to;
  - identifying the ranges of cells belonging to said set; and
  - pasting the content of the buffer in each of identified range of cells belonging to said set.

2. The method of Claim 1 wherein the step of defining a set of ranges of cells further comprises the steps of:

- adding a new range of cells to said set of ranges of cells, wherein said step of adding further comprises the steps of:

- selecting a new range of cells; and
- creating a link between the new range of cells with at least one range of cells belonging to said set of ranges of cells.

5     3. The method according to claim 1, wherein the step of defining a set of ranges of cells further comprises the step of:

- performing a persistent copy operation on a first range of cells, wherein said persistent copy operation comprises the steps of:

- selecting a first range of cells;
- copying onto a buffer the selected first range of cells;

- performing a persistent paste operation, wherein said persistent paste operation comprises the steps of:

- Selecting at least one other range of cells; and

for each other selected range of cells:

- copying the content of said buffer onto each other selected range of cells; and
- creating a link between each other range of cells and the first range of cells.

4.     The method according to claim 3, wherein the step of performing a persistent copy operation further comprises the step of:

- invoking a persistent copy command; and

wherein the step of performing a persistent paste operation further comprises the step of:

- invoking a persistent past command.

5. The method according to claim 1, wherein the step of defining a set of ranges of cells further comprises the steps of:

- storing in a table a name for identifying said set of ranges of cells;
- storing in said table means, preferably a name or an address, for identifying each range of cells belonging to said set; and
- creating a link in said table between the name of the set and said means for identifying each range of cells belonging to said set.

6. The method according to claim 1, wherein the step of defining a set of ranges of cells further comprises the step of:

- associating the ranges of cells belonging to said defined set with set dependent display attributes.

7. The method according to claim 5, wherein the step of associating the ranges of cells belonging to said defined set, further comprises the steps of:

- associating a first variable with said set of ranges of cells;
- setting said first variable to a set dependent value; and

- displaying the ranges of cells of said set with display attributes according to the value of said first variable.

8. The method according to claim 4, wherein the step of storing in said table means for identifying each range of cells belonging to said set, further comprises the steps of:

for each range of cells belonging to said set:

- determining current attributes of said range of cells;
- storing in said table said current attributes; and
- associating in said table the range of cells with the current attributes.

9. The method according to claim 7, wherein the step of storing in said table said current attributes, comprises the further step of:

- associating a second variable with each range of cells; and
- setting said second variable to a value associated with said current attributes.

10. The method according to claim 7, further comprising the step of removing a range of cells from the set of ranges of cells, wherein the step of removing further comprises the step of:

- retrieving the current attributes associated with said range of cells; and
- displaying said range of cells with said current display attributes.